

CLAIMS

1. An apparatus for affixing a tire component member in which a band-shaped tire component member having a given width is affixed on a peripheral face of a rotatable drum made of a rigid material at a given length range and over a given angle range, characterized in that a traveling head moving forward and rearward in an axial direction of a drum is arranged at an outer peripheral side of a drum, and a clamp means is independently arranged from the traveling head for pushing a front end portion of a tire component member protruded ahead from the traveling head on the peripheral face of the drum at a forward moving state of the traveling head, and a cutting means for the tire component member is arranged at one end side of the drum separated away from the clamp means, and a guide means specifying a widthwise position of the tire component member and a chuck means pulling out the tire component member to the clamp means under a forward displacement of the traveling head are arranged in the traveling head.

2. An apparatus for affixing a tire component member according to claim 1, which further comprises means for applying tension to the tire component member.

3. An apparatus for affixing a tire component member according to claim 1 or 2, wherein at least the chuck means is made possible to displace near to a center axial line of the drum.

4. An apparatus for affixing a tire component member according to any one of claims 1 to 3, wherein a pushing means capable of pushing the tire component member onto the peripheral face of the drum accompanied with the rearward displacement of the traveling head is arranged on the traveling head.

5. An apparatus for affixing a tire component member according to any one of claims 1 to 4, which further comprises a guide rail supporting the traveling head and guiding the forward and rearward displacement thereof.

6. An apparatus for affixing a tire component member according to any one of claims 1 to 5, wherein the cutting means is constructed with a fixed shear blade arranged over a full periphery of an end of the drum and a movable shear blade located in correspondence to the fixed shear blade.

7. An apparatus for affixing a tire component member according to any one of claims 1 to 5, wherein the cutting means is a rotational cutting blade or a

ultra-sonic vibration cutting blade.

8. An apparatus for affixing a tire component member according to any one of claims 1 to 7, which further comprises an affixing means pushing a side portion of the tire component member affixed on the peripheral face of the drum onto the peripheral face of the drum or the adjoining tire component member over a full length of the tire component member.

9. A method of affixing a tire component member using an apparatus as claimed in any one of claims 1 to 8 in which a band-shaped tire component member having a given width is affixed on a peripheral face of a rotatable drum made of a rigid material at a given length range and over a given angle range, characterized in that the tire component member is affixed in an axial direction of a drum while pushing a front end portion of the tire component member onto a peripheral face of the drum by means of a clamp means, and after the completion of one affixing, the tire component member is cut at a position corresponding to an axis end of the drum, and then a front end portion of a next tire component member is pulled out to a position of the clamp means through a forward displacement of a traveling head while turning the drum over an angle range corresponding to the width of the tire component member, and thereafter these operations are repeated.

10. A method of affixing a tire component member according to claim 9, wherein the tire component member is affixed on the drum so as to overlap at a given amount in the widthwise direction.

11. A method of affixing a tire component member according to claim 9 or 10, wherein the affixing number of the tire component member having a constant width is changed in accordance with a designation of a rim size for the tire.

12. A method of affixing a tire component member according to any one of claims 9 to 11, wherein the front end portion of the tire component member is pulled out to the position of the clamp means.

13. A method of affixing a tire component member according to any one of claims 9 to 12, wherein the tire component member is affixed onto the peripheral face of the drum, after the completion of one affixing step of the tire component member and before the start of the cutting step, the affixed rear end

of the tire component member is closely adhered to the peripheral face of the drum.